

M.Cubed

Policy Analysis for the Public and Private Sectors

Date: February 15, 2002

To: CONCUR, Inc.
Fr: David Mitchell, M.Cubed
cc: Tom Gohring, WUE Program Manager

Re: Overview of compliance terms contained within the Urban MOU

This memorandum provides an overview of the compliance terms contained within the Urban MOU. This overview is based on interpretation of Sections 4 and 6 and Exhibits 1 and 3 of the Urban MOU. The overarching purpose of this memorandum is to address the question: What constitutes compliance with the Urban MOU? A secondary purpose is to identify where existing tools, data, or protocols have been developed or are being developed that could aid in the determination of a water supplier's compliance with these terms.

It should be noted from the beginning that interpretations of compliance terms contained within this memorandum are not nor do they necessarily reflect adopted policy of the CUWCC or any other organization. They should be solely attributed to the author of this memorandum.

Terms of compliance can be divided into four areas:

- (1) BMP Implementation (MOU Section 4.6 and Exhibit 1)
- (2) BMP Exemption (MOU Section 4.5 and Exhibit 3)
- (3) BMP Reporting (MOU Sections 4.1, 6.2, and Exhibit 1)
- (4) Good Faith Effort (MOU Section 4.4)

BMP Implementation

Compliance with respect to BMP implementation is primarily addressed by Section 4.6 and Exhibit 1 of the Urban MOU. Exhibit 1 deals with the implementation schedule, coverage requirements, and criteria to determine implementation status for each BMP, while Section 4.6 addresses ways in which agencies may, within certain limits, elect to modify the implementation schedule prescribed by Exhibit 1.

Figure 1 provides a conceptual diagram of MOU compliance for BMP implementation that could be applied to any of the 14 BMPs based on Exhibit 1 and Section 4.6 requirements. One way to view the diagram is as a sequence of "compliance" tests. The first test is simply whether the agency is exempt from implementing the BMP. If the answer is yes then they have complied with the implementation requirements for this BMP and nothing further need be considered. However, if the answer is no, then the second test would address whether the agency's implementation satisfies Exhibit 1, Section E requirements. If the answer is yes then they have complied with the implementation requirements for this BMP. If the answer is no, then a third test would be needed. This third test would consider whether implementation satisfies the "at least as effective as" provision contained in Exhibit 1 or the schedule modification provisions contained in Section 4.6. If the answer is yes then the agency's implementation would comply with MOU requirements. However, if the answer is no, then the agency's implementation of the BMP would not comply with MOU requirements.

Generally, these tests would be straightforward to implement. The test of exemption status, of course, is dependent on a separate exemption process. Assuming such a process were in place and preceded the review of BMP implementation status, then the test would simply consist of verifying whether an agency has an active exemption for the BMP in question. Exemption status can be stored by the CUWCC's existing BMP reporting website/database and therefore this test could be completely automated. The data required to implement the second test, compliance with Exhibit 1 Section E requirements, is also captured by the CUWCC's existing BMP reporting website/database and therefore this test could also be completely automated. In fact, the CUWCC has already developed the necessary scripts and reports to implement this test for every BMP except BMP 14.

The third test, at least as effective as or deviation from implementation schedule could not be automated through the BMP reporting website/database in the same way as the second test. In this regard, it is much more akin to the first test. Determination that an agency's BMP implementation is at least as effective as Exhibit 1 methods would require, first, a definition of what constitutes "at least as effective as" implementation and, second, some type of review process to determine that the agency's approach satisfies this definition. The CUWCC has a draft definition for what constitutes "at least as effective as" implementation as well as a proposed process for reviewing agency applications. This draft definition and review process were tested during the CUWCC's second Exemption Review Test and seemed to work well. As with exemptions, assuming a decision-making process for "at least as effective as" determinations were in place, then outcomes could be stored by the CUWCC's existing BMP reporting website/database for the purposes of compliance reporting.

BMP Exemption

Compliance with the BMP exemption requirements is addressed by MOU Section 4.5 and Exhibit 3.¹ Exemption from BMP implementation requires an agency to substantiate that either (1) the BMP is not cost-effective to implement, or (2) adequate funds are not and cannot reasonably be made available to implement the BMP, or (3) implementation is not within the legal authority of the water supplier, it has attempted to get others with the legal authority to carry out the BMP, and it has acted to encourage removal of institutional barriers to implementation. If an agency is not implementing a BMP and has not substantiated at least one of the three causes for exemption, then they would not be in compliance with the terms of the MOU. Section 4.5 also states that water suppliers shall submit exemptions within two months following the start of the reporting period for which the exemption is being sought. Thus, water suppliers filing exemptions after this deadline would in a strict sense not be in compliance with the terms of the MOU.

Figure 2 presents a conceptual diagram of MOU compliance with respect to the MOU's exemption requirements contained in Section 4.5 and Exhibit 3. As with BMP implementation, exemption compliance is represented as a series of tests. The first test deals with the submittal deadline. The other three tests refer to each of the three causes for exemption. In actuality these latter three tests for cause could easily be collapsed into a single review process. However, they are represented here as separate tests for purposes of clarity and exposition.

¹ The CUWCC's Guidelines for Preparing Cost-Effectiveness Analyses of Urban Water Conservation Best Management Practices (1996) were developed in accordance with Exhibit 3 requirements and can be viewed as an extension of Exhibit 3.

Of the three causes for exemption, an exemption based on legal authority would likely be the most straightforward to define, review, and make a decision about. For this cause, the facts of the matter should be easy to verify and substantiate.

The same is not the case for the other two causes. For the cost-effectiveness cause, many important definitional issues are addressed by the MOU and supporting documents, but several key issues remain unresolved. For example, there still remains significant uncertainty and disagreement about what constitutes appropriate measurement of a water supplier's avoided costs of water supply (a key element on the benefits side of the ledger for conservation programs).² Likewise significant uncertainty and disagreement over how best to measure and value environmental costs and benefits associated with BMP implementation persists, even though inclusion of these values is required by Exhibit 3.³ These issues have a tendency to overshadow how much is already available to support an exemption review process. Exhibit 3 provides a framework and methodology for deciding whether a BMP is cost-effective for a water supplier to implement. It also defines the perspectives that must be considered as well as the costs and benefits that should be addressed by the analysis. Additionally, the CUWCC Guidelines for Preparing Cost-Effectiveness Analyses of Urban Water Conservation Best Management Practices provides a template for formulating the necessary analyses, and the CUWCC's BMP Costs & Savings Study compiles data on water savings and implementation costs for many of the BMPs. Additionally, the CUWCC has developed and twice tested a process for submitting and reviewing exemption requests based on the cost-effectiveness cause. While the exemption test outcomes have generated substantial controversy within the CUWCC (especially with respect to whether such a review process should be internal or external to the CUWCC), there seems to be general agreement that much of the material developed to support the review process, such as review checklists and exemption templates, would usefully support any future review process.

Not nearly as much progress has been made on the remaining cause for exemption, the budgetary cause. In the case of the budgetary cause, most definitional issues remain unaddressed. As an example, it is very unlikely that there exists a common understanding as to what would constitute inadequate funds for the purposes of BMP implementation. One could imagine many possible definitions. Ten years into the MOU, a consensus definition has yet to emerge. Indeed, the issue has very rarely been discussed within CUWCC forums. Likewise, a definition of what constitutes a less cost-effective water management option is likely to be equally problematic. This entire topic represents new ground. Heretofore the focus within the CUWCC has been almost exclusively on the cost-effectiveness cause for exemption.

BMP Reporting

BMP reporting requirements are addressed in Sections 4.1.d., 6.2 and Exhibit 1. Section 4.1.d. states simply that the reporting requirements contained in Exhibit 1 are considered the minimum record keeping and reporting requirements for water suppliers to document BMP implementation levels. It also states that this data will provide the basis for evaluating BMP implementation progress by water suppliers. Section 6.2 requires water suppliers to submit standardized reports every other year to the CUWCC providing sufficient information to inform the CUWCC on the progress being made toward implementing

² The CUWCC is currently developing an RFP for a comprehensive literature review and summary on methods of estimating utility avoided costs. This review is expected to be completed by the end of September, 2002. Following the review, the CUWCC anticipates initiating a second project phase to develop CUWCC guidelines for evaluating water supplier avoided costs of supply. These guidelines are likely to be available sometime in 2003.

³ One of the tasks included within the CUWCC's CALFED/DWR/USBR grant application is development of data, methods, and protocols for including environmental values in BMP benefit cost analyses. Provided funding, this work is expected to occur over 2002-2003.

the BMPs. It is similar to Section 4.1.d but also addresses the frequency of reporting. Section D of each BMP definition contained in Exhibit 1 provides a list of the actual data to be reported to the CUWCC for the BMP.

Figure 3 provides a conceptual diagram of MOU compliance with respect to water supplier reporting requirements. A check for compliance requires two tests. First, has the water supplier met the reporting deadline. Second, does the submitted information meet the minimum reporting requirements listed in Section D of each BMP definition contained in Exhibit 1. A “no” response to either test would indicate the water supplier has not complied with the MOU.

The CUWCC’s BMP reporting website/database encompasses all of the reporting requirements for each BMP. It also tracks whether water supplier reports are complete and when they are submitted. Thus, with one important exception, the compliance tests for BMP reporting could be completely automated within the CUWCC’s BMP reporting website/database. The important exception concerns “at least as effective as” BMP implementation. In this instance, the reporting website/database might not be able to capture the basic data required to determine BMP implementation progress. Separate reporting and tracking processes might be required.

Good Faith Effort

Section 4.4 states that a good faith effort to implement BMPs will be required of all signatory water suppliers. It goes on to list five “measures” of good faith effort. These measures are listed in Figure 4. Since the signing of the original MOU in 1991, very little discussion regarding what constitutes good faith effort or how to objectively measure it has taken place within the CUWCC.

The measures of good faith effort addressed by Sections 4.4.b and 4.4.e.⁴ would seem to be subsumed in the legality cause for exemption addressed by Section 4.5. That is, by definition, any agency receiving a BMP exemption on the basis of legality would need to have substantiated that it had satisfied 4.4.b. and 4.4.e. (compare 4.5.c. with these two sections to see that this is so). Thus these two measures of good faith effort are addressed through the MOU’s exemption requirements and thus need not be addressed further.

The measures of good faith effort contained in Sections 4.4.a., 4.4.c., and 4.4.d, could be substantially more difficult to make operative. For example, it is very unclear what exactly is required under 4.4.a. While 4.4.c. is perhaps more straightforward to interpret, what would constitute a reliable and objective measurement of this effort? Finally, 4.4.d. -- optimization of water savings -- could be interpreted in many different ways. Does optimization entail maximizing the water savings yield or the economic benefit from the BMP? What is economically optimal may not always result in maximum possible savings. These are issues that, to our knowledge, have never been the subject of sustained discussion within the CUWCC. As with questions raised by the budgetary cause for exemption, this section of the MOU represents new ground for discussion.

⁴ Note that some versions of the MOU contain a typographic error whereby Section 4.4.e. is labeled 4.4.d.

Figure 1. Example of BMP Implementation Compliance Tree Per MOU Sect. 4.6 and Exhibit 1

This conceptual diagram of MOU compliance for BMP implementation could apply to any of the 14 BMPs, though implementation criteria per Sect. E of each BMP's definition would vary. "ALAEA" stands for "At Least As Effective As."

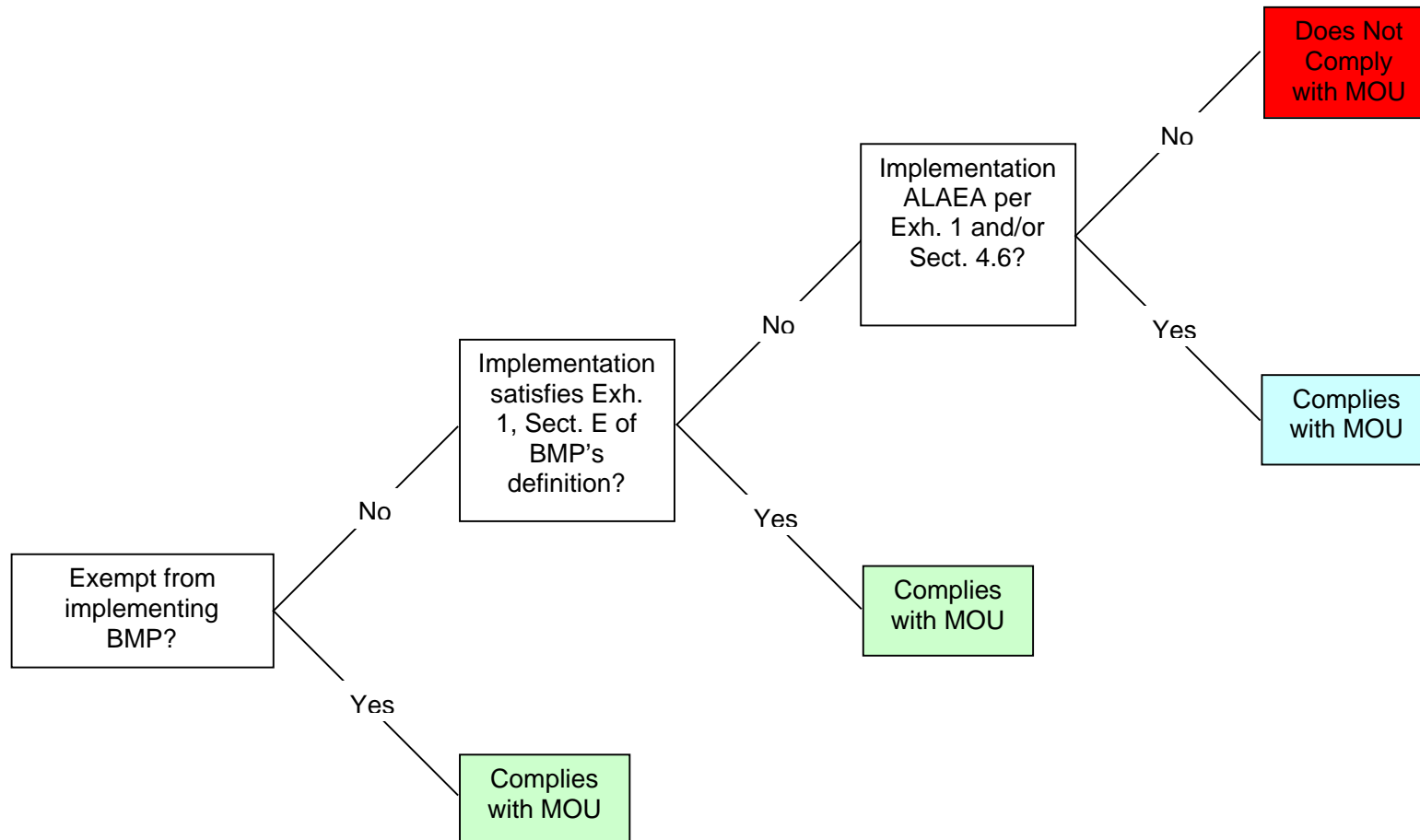


Figure 2. Example of BMP Exemption Compliance Tree Per MOU Sect. 4.5 and Exhibit 3

This conceptual diagram of MOU compliance for BMP exemption could apply to any of the 14 BMPs.

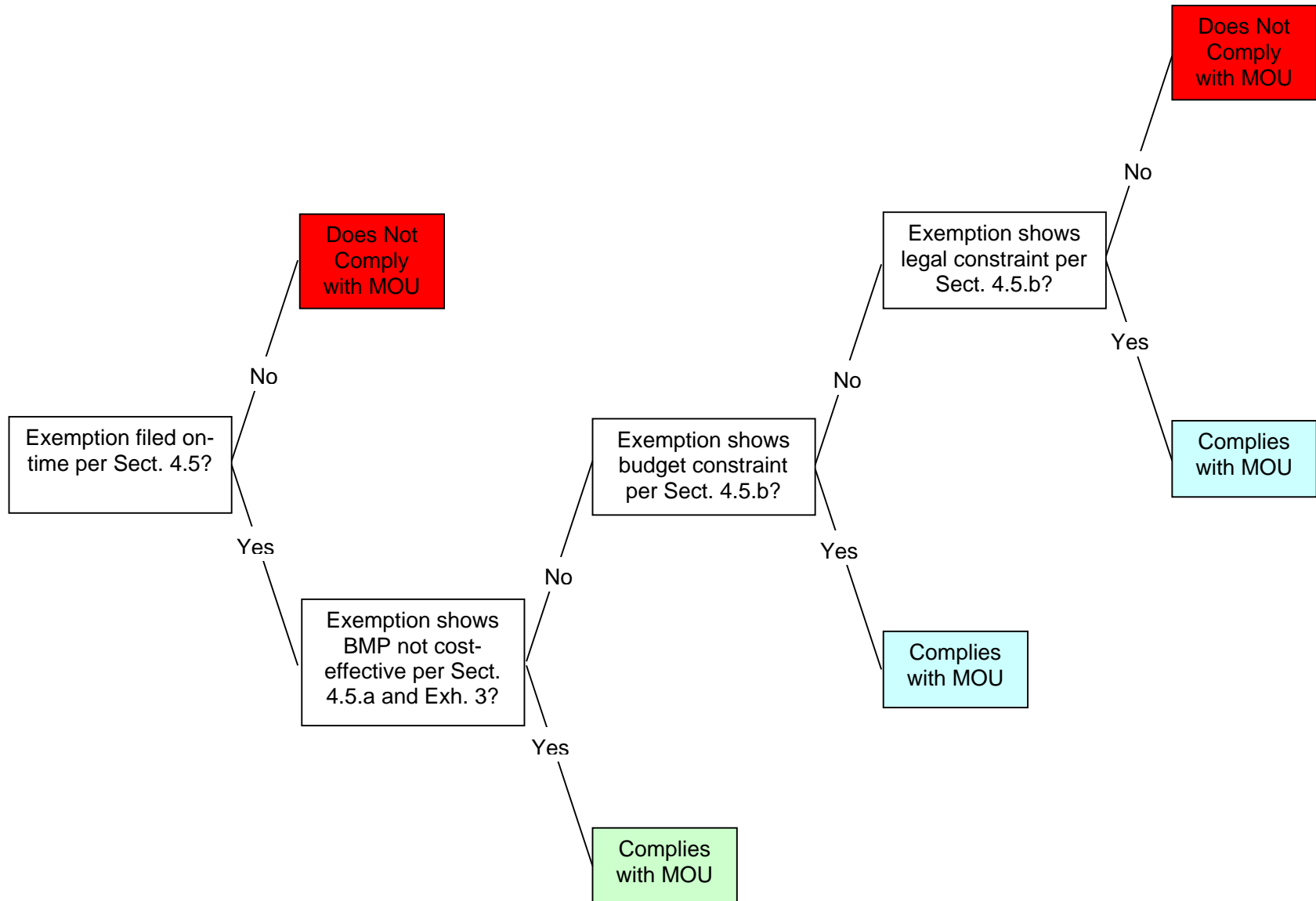


Figure 3. Example of BMP Reporting Compliance Tree Per MOU Sect. 4.1, 6.2, and Exhibit 1

This is a conceptual diagram of MOU compliance for BMP reporting.

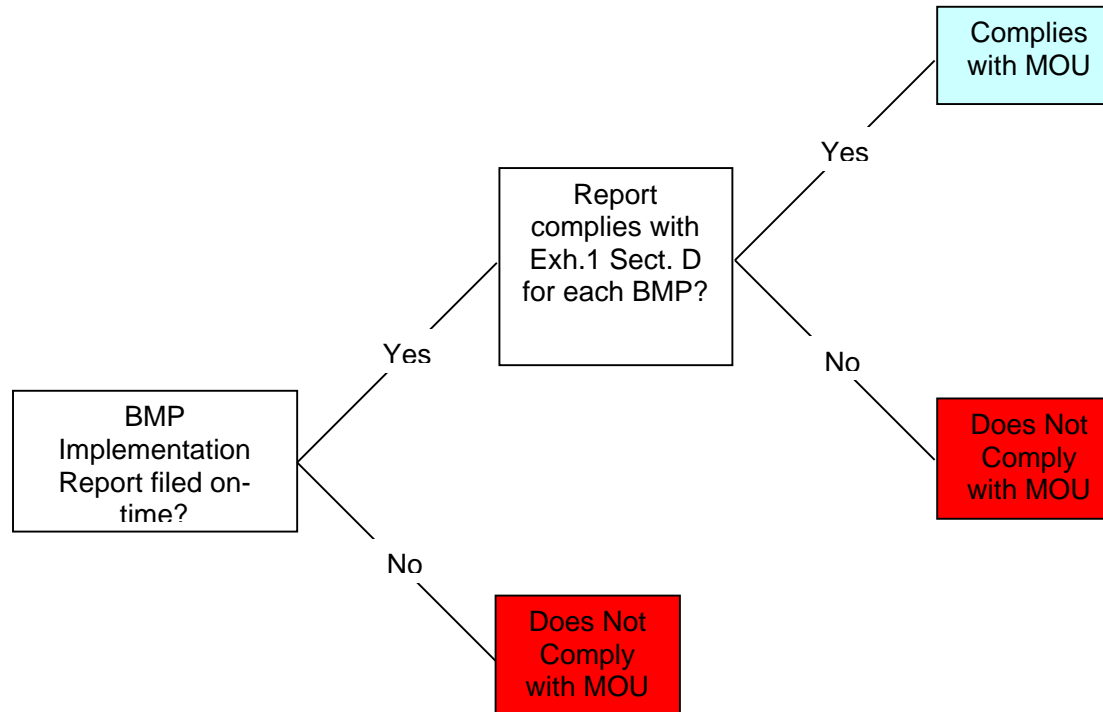


Figure 4. Example of BMP Good Faith Effort Compliance Tree Per MOU Sect. 4.4

This is a conceptual diagram showing the individual elements that constitute “good faith effort” implementation per MOU Section 4.4.

